

COUNCIL COPY

PURCHASING & LICENSING COMMITTEE

11-0291R

RESOLUTION AWARDING A CONTRACT WITH ENVENTIS TELECOM, INC., FOR THE PURCHASE AND DELIVERY OF CISCO INFRASTRUCTURE EQUIPMENT TO SUPPORT THE CITY'S VOICE AND DATA NETWORK FOR A TOTAL AMOUNT OF \$1,204,282.95.

CITY PROPOSAL:

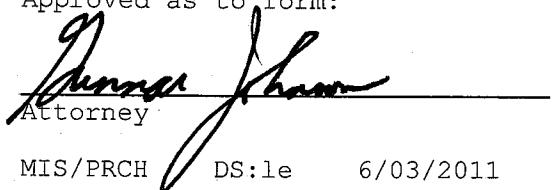
RESOLVED, that city officials are hereby authorized to enter into a contract with Enventis Telecom, Inc., for the purchase and delivery of Cisco infrastructure equipment to support the city's voice and data network in accordance with approved specifications and the vendor's quote of \$1,204,282.95, terms net 30, payable as follows:

Amount	Fund	Dept./Agy.	Div.	Obj.	Proj. No.
	Cap. Equip.	Admin. Svcs.	Fiscal Yr.	Cap. Equip.	
\$66,376.00	250	015	2009	5580	CE250-E910
\$155,838.00	250	015	2010	5580	CE250-E1005
* \$982,068.95	250	015	2011	5580	CE250-E1106

Approved:


Lynn S. Russell
Department Director
Purchasing Agent DTS

Approved as to form:

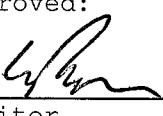

Dennis J. Shaw
Attorney

MIS/PRCH DS:le 6/03/2011

Approved for presentation to council:


Dale M. Johnson
Chief Administrative Officer

Approved:


Auditor

STATEMENT OF PURPOSE: This resolution authorizes a contract with Enventis Telecom, Inc., for the purchase and delivery of Cisco network infrastructure equipment for a total amount of \$1,204,282.95, payable from the capital equipment fund. Network

infrastructure equipment includes items such as switches, cables, and routing devices.

This purchase is for the replacement and additional equipment necessary to operate the city's voice and data network. Existing network equipment is reaching the end of its functional life, and has aged to the point where failure of critical infrastructure is increasingly likely. While enabling the city to provide improved services such as wireless access to the city's users, this new equipment will also give the city a more robust, dependable, and efficiently designed network infrastructure, while ensuring against systemwide redundancy.

The purchasing division posted a request for bids May 11, 2011, on the city's website. Purchasing staff emailed requests for bids to five vendors and received one complete bid response from Enventis Telecom, Inc., by the May 25, 2011, closing date.

Enventis Telecom, Inc., is located in Mankato, Minnesota, with a sales representative in Duluth.

Requisition No. 11-0369

Resolution 11-0291R Cisco Infrastructure Equipment

Bids were sent to: Qwest, CDWG, Insight, Midwave Corp., and Enventis, as well as posted on the City's bid website.

Enventis was the only respondent to the bid.

Executive Summary

As with any organization, the ability to grow and take advantage of advances in technology, while continuing to meet the ever growing technology needs of the organization, requires having a stable and redundant infrastructure to build upon. The Network Redesign project is exactly that. This network redesign will be implemented to replace current end of life equipment and enable the City of Duluth to take advantage of emerging technologies which will allow for continued growth.

The industry standard life cycle for network infrastructure equipment is five years. The City's current network infrastructure was designed and implemented nine years ago. While this network infrastructure has served the City well over the past nine years, it has far surpassed its life expectancy. Therefore, this equipment is in need of replacement to ensure successful and uninterrupted operations of the City's network infrastructure and allow for our ever growing technology needs.

The age alone, of our network equipment has put the City at risk, as the majority of our network equipment is either at the end of its life cycle or within months of being there. Simply put, this means that the availability of support and parts is becoming a very real threat to operations. By continuing to rely on this outdated equipment in our production environment, it continues to put the City at an extremely high risk that a major service outage could be incurred if an equipment failure takes place.

Over the past years, the City's use of technology has grown and we will continue to see exponential growth for the foreseeable future. In order to meet those needs, we need to ensure that our current systems can continue to accommodate that growth over the life cycle of the systems.

This redesign will position the City to be able to accommodate the growth needs into the future. Many new business systems have been implemented over the past years and there will be many more to come. These system needs, in addition to the large increase in the use of technology by all departments within the City requires our infrastructure to be able to handle much larger bandwidth needs than has been needed in the past. These bandwidth and technology needs will continue to grow as our user departments continue to rely on technology to allow them to do more with less and as we continue the implementation of more self service offerings to our public citizens.

This redesign will provide a scalable environment providing redundancy in critical areas of the network, reduced network administration by standardizing on equipment, implementation of network monitoring technologies enabling a proactive capability to analyze network performance, flexible configuration, the

opportunity to accommodate for increased backbone capacity between closets, improved network performance for remote facilities, as well as from the desktop to the servers.

MIS has begun the planning for a five year replacement schedule for network infrastructure that will allow the City to begin to put the City's infrastructure equipment on an annual replacement plan, much like is done with other capital equipment. This approach to replacement will allow for easier budgeting of these replacements as will have a planned replacement schedule and known cost estimates. While we will need to continue to refresh network equipment to meet industry standard life cycles, it is much more manageable to be able to do this on an annual basis, both from a budgetary perspective as well as from a project resources perspective.



Product and Maintenance Quote

Quote Date: 5/24/2011

Quote Number: 110207r11-332132

Project: 2011 Network Architecture 5yr Smaonet

Customer: City of Duluth

Customer Contact: Rod and Paul

Phone: 0

Enventis

2950 Xenium Lane North, Suite #138

Plymouth, MN 55441

(763) 577-3900 - Main Phone

Address:

Account Manager: Matthew Shultz

Direct Extension: 218-740-6134

City Hall

Core | Data Center | User Distribution | WAN Aggregation

Nexus 5548 Core Replacement

Part Number	Description	Qty	Unit Price	Ext. Price
N5K-C5548UP-FA	Nexus 5548 UP Chassis, 32 10GbE Ports, 2 PS, 2 Fans	2	\$ 14,592.00	\$ 29,184.00
CAB-AC-250V/13A	North America,NEMA L6-20 250V/20A plug-IEC320/C13 receptacle	4	\$ -	\$ -
SFP-10G-SR	10GBASE-SR SFP Module	17	\$ 852.15	\$ 14,486.55
N55-D160L3	Nexus 5548 Layer 3 Daughter Card	2	\$ 2,850.00	\$ 5,700.00
N55-BAS1K9	Layer 3 Base License for Nexus 5500 Platform	2	\$ -	\$ -
N55-LAN1K9	Layer 3 License for Nexus 5500 Platform	2	\$ 5,700.00	\$ 11,400.00
N55-M-BLNK	Nexus 5500 Module Blank Cover	2	\$ -	\$ -
N55-PAC-750W	Nexus 5500 PS, 750W, Front to Back Airflow	4	\$ -	\$ -
N5548-ACC-KIT	Nexus 5548 Chassis Accessory Kit	2	\$ -	\$ -
N5548P-FAN	Nexus 5548P Fan Module	4	\$ -	\$ -
N5KU9-503N1.1	Nexus 5000 Base OS Software Rel 5.0(3)N1(1)	2	\$ -	\$ -
CON-SNT-C5548UP	SMARTNET 8x6 NBD Nexus 5548 Layer 3 Daughter Card 32 10GbE Ports	10	\$ 180.95	\$ 1,809.50
CON-SNT-C5548UP	SMARTNET 8x6 NBD Nexus 5548 UP Chassis 32 10GbE Ports	10	\$ 817.74	\$ 8,177.40
Subtotal				\$ 70,757.46

Nexus 5548 Collapsed Data Center Replacement

Part Number	Description	Qty	Unit Price	Ext. Price
N5K-C5548UP-FA	Nexus 5548 UP Chassis, 32 10GbE Ports, 2 PS, 2 Fans	2	\$ 14,592.00	\$ 29,184.00
CAB-AC-250V/13A	North America,NEMA L6-20 250V/20A plug-IEC320/C13 receptacle	4	\$ -	\$ -
SFP-10G-SR	10GBASE-SR SFP Module	4	\$ 852.15	\$ 3,408.60
SFP-H11GB-ACU7M	Active Twintax cable assembly, 7m	8	\$ 205.20	\$ 1,641.60
SFP-H110GB-CU5M	10GBASE-CU SFP+ Cable 5 Meter	8	\$ 148.20	\$ 1,185.60
N55-D160L3	Nexus 5548 Layer 3 Daughter Card	2	\$ 2,850.00	\$ 5,700.00
N55-BAS1K9	Layer 3 Base License for Nexus 5500 Platform	2	\$ -	\$ -
N55-M-BLNK	Nexus 5500 Module Blank Cover	2	\$ -	\$ -
N55-PAC-750W	Nexus 5500 PS, 750W, Front to Back Airflow	4	\$ -	\$ -
N5548-ACC-KIT	Nexus 5548 Chassis Accessory Kit	2	\$ -	\$ -
N5548P-FAN	Nexus 5548P Fan Module	4	\$ -	\$ -
N5KU9-503N1.1	Nexus 5000 Base OS Software Rel 5.0(3)N1(1)	2	\$ -	\$ -
CON-SNT-C5548UP	SMARTNET 8x6 NBD Nexus 5548 Layer 3 Daughter Card 32 10GbE Ports	10	\$ 180.95	\$ 1,809.50
CON-SNT-C5548UP	SMARTNET 8x6 NBD Nexus 5548 UP Chassis 32 10GbE Ports	10	\$ 817.74	\$ 8,177.40
Subtotal				\$ 51,106.70

Nexus 2248 FEX Collapsed Data Center Replacement

Part Number	Description	Qty	Unit Price	Ext. Price
N2K-C2248TF-1GE	Nexus 2248TP with 8 FET	2	\$ 6,270.00	\$ 12,540.00
CAB-N5KGA-NA	Power Cord, 200/240V 6A North America	4	\$ -	\$ -
FET-10G	10G Line Extender for FEX	16	\$ -	\$ -
CON-SNT-N2248F	SMARTNET 16x6 NBD Nexus 2248TP with 8 FET	10	\$ 173.25	\$ 1,732.50
Subtotal				\$ 14,272.50

Cisco UCS Velocity Bundle (Config Set: CS2414867 / Access Key: 2990)

Part Number	Description	Qty	Unit Price	Ext. Price
UCS-SP-ENTB-250	UCS YES BNDL2Flx1xChassis-2xB250,2x5675,192GB,2x146GHD,2xP	1	\$ -	\$ -
A01-X0117	Intel Xeon E5675 3.0GHz 6c/95W/12MB cache/DDR3 1333MHz	1	\$ -	\$ -
A02-M316GB1-2	16GB DDR3-1333MHz RDIMM/PC3-10600/2x8GB Kit	1	\$ -	\$ -
A02-MEMKIT-008A	Bundle component for A02-M316GB1-2	1	\$ -	\$ -
A03-D148GC2	146GB 6Gb SAS 15K RPM SFF HDD/hot plug/drive sled mounted	1	\$ -	\$ -
DS-SFP-FC8G-SW	8 Gbps Fibre Channel S/W SFP+, LC	1	\$ -	\$ -
N01-UAC1	Single phase AC power module for UCS 5108	1	\$ -	\$ -
N10-E0080	6-port 8Gb FC Expansion module/UCS 6100 Series	1	\$ -	\$ -
N10-PAC1-550W	550W power supply unit for UCS 6120XP/100-240VAC	1	\$ -	\$ -
N10-SACCA	Accessory kit for UCS 6120XP Fabric Interconnect	1	\$ -	\$ -
N20-AC0002	UCS M81KR Virtual Interface Card/PCIe/2-port 10Gb	1	\$ -	\$ -
N20-B6625-2	UCS B250 M2 Blade Server w/o CPU, memory, HDD, mezzanine	1	\$ -	\$ -
N20-BHTS4	CPU heat sink for UCS B250 M2 Blade Server	1	\$ -	\$ -

N20-CAK0	FOR YES blade bundles - Access./rall kit UCS 5108 chassis	1	\$ -	\$ -
N20-CBLKB1	Blade slot blanking panel for UCS 5108/single slot	1	\$ -	\$ -
N20-FAN5	Fan module for UCS 5108	1	\$ -	\$ -
N20-FW006	UCS 5108 Blade Server Chassis FW package	1	\$ -	\$ -
N20-I8584	UCS 2104XP Fabric Extender/4 external 10Gb ports	1	\$ -	\$ -
N20-PAC5-2500W	2500W power supply unit for UCS 5108	1	\$ -	\$ -
SFP-10G-SR	10GBASE-SR SFP Module	1	\$ -	\$ -
SFP-H10GB-CU3M	10GBASE-CU SFP+ Cable 3 Meter	1	\$ -	\$ -
CAB-9K12A-NA	Power Cord, 125VAC 13A NEMA 5-15 Plug, North America	1	\$ -	\$ -
CAB-AC-C6K-TWLK	Power Cord, 250Vac 16A, twist lock NEMA L6-20 plug, US	1	\$ -	\$ -
UCS-YES-B250-12	UCS YES BNDL 1xChassis,2xB250,2x5675,192GB,2x146GBHDD,2xPax	1	\$ 43,652.31	\$ 43,652.31
UCS-YES-S6100	UCS 20-port Fw with FC expansion card and cables bundle	1	\$ 7,999.38	\$ 7,999.38
N10-MGT006	UCS Manager v1.4	1	\$ -	\$ -
CON-UCS7/E0080	UC SUPPORT 24X7X4OS 8P/18GbFC/Expansion Mod/UCS5108001Sej	10	\$ 7,623.00	\$ 76,230.00
CON-UCS7/B66262	UC SUPPORT 24X7X4OS UC5B260/M2/Blade Sv/w/o CPU/Mem/HDD	10	\$ 2,787.74	\$ 27,877.40
CON-UCS7/ENTVB25D	UC SUPPORT 24X7X4OS UC5/SP/ENTV/B25D	10	\$ -	\$ -
CON-UCS7/AB25012	UC SUPPORT 24X7X4OS Promotional UCS-YES-B25012	15	\$ 10,164.00	\$ 152,440.00
CON-UCS7/S6100	UC SUPPORT 24X7X4OS Promotional UCS-YES-S6100	15	\$ 193.97	\$ 2,909.55
			Subtotal	\$ 58,177.44

Cisco UCS Velocity Bundle Add-On

Part Number	Description	Qty	Unit Price	Ext. Price
UCS-SP-EXPV-B200	UCS SP BNDL 1xChassis-4xB200,2x5650,48GB,2x146GHD,1xPalo	1	\$ -	\$ -
A01-X0165	2.66GHz Xeon X5650 85W CPU/12MB cache/DDR3 1333MHz	1	\$ -	\$ -
A03-D146GA2	146GB 8Gb SAS 10K RPM SFF HDD hot plug drive sled mounted	1	\$ -	\$ -
N01-M306GB2	8GB DDR3-1333MHz RDIMM/PC3-10600/dual rank 2Gb DRAMs	1	\$ -	\$ -
N01-UAC1	Single phase AC power module for UCS 5108	1	\$ -	\$ -
N20-AC0002	UCS M81KR Virtual Interface Card/PCIe/2-port 10Gb	1	\$ -	\$ -
N20-B6625-1	UCS B200 M2 Blade Server w/o CPU, memory, HDD, mezzanine	1	\$ -	\$ -
N20-BHTS1	CPU heat sink for UCS B200 Blade Server	1	\$ -	\$ -
N20-CAK0	FOR YES blade bundles - Access./rall kit UCS 5108 chassis	1	\$ -	\$ -
N20-CBLKB1	Blade slot blanking panel for UCS 5108/single slot	1	\$ -	\$ -
N20-FAN5	Fan module for UCS 5108	1	\$ -	\$ -
N20-FW006	UCS 5108 Blade Server Chassis FW package	1	\$ -	\$ -
N20-I8584	UCS 2104XP Fabric Extender/4 external 10Gb ports	1	\$ -	\$ -
N20-PAC5-2500W	2500W power supply unit for UCS 5108	1	\$ -	\$ -
CAB-AC-C6K-TWLK	Power Cord, 250Vac 16A, twist lock NEMA L6-20 plug, US	1	\$ -	\$ -
UCS-YES-B200-14	UCS YES BNDL Chass+B200,2x5650, 48Gb, Palo, 2146GB HDD	1	\$ 39,304.35	\$ 39,304.35
SFP-10GB-CU3M=	10GBASE-CU SFP+ Cable 3 Meter	1	\$ 119.70	\$ 119.70
CON-UCS7/B66261B	UC SUPPORT 24X7X4OS UC5B260/M2/Blade Sv/w/o CPU/Mem/HDD	20	\$ 193.97	\$ 3,879.00
CON-UCS7/EXPVB20D	UC SUPPORT 24X7X4OS UC5/SP/EXPV/B20D	15	\$ -	\$ -
CON-UCS7/YB20014	UC SUPPORT 24X7X4OS Promotional UCS-YES-B20014	15	\$ 1162.00	\$ 17,430.00
			Subtotal	\$ 43,769.15

Nexus 5548 User Distribution Add-on

Part Number	Description	Qty	Unit Price	Ext. Price
N5K-C5548UP-FA	Nexus 5548 UP Chassis, 32 10GbE Ports, 2 PS, 2 Fans	2	\$ 14,692.00	\$ 29,184.00
CAB-AC-250V/13A	North America,NEMA L6-20 250V/20A plug-IEC320/C13 receptacle	4	\$ -	\$ -
SFP-10G-SR	10GBASE-SR SFP Module	6	\$ 852.15	\$ 5,112.90
SFP-H10GB-ACU7M	Active Twinax cable assembly, 7m	0	\$ 205.20	\$ 205.20
SFP-H10GB-CU5M	10GBASE-CU SFP+ Cable 5 Meter	2	\$ 148.20	\$ 296.40
GLC-SX-MM	GE SFP, LC connector SX transceiver	30	\$ 285.00	\$ 8,550.00
N55-D160L3	Nexus 5548 Layer 3 Daughter Card	2	\$ 2,850.00	\$ 5,700.00
N55-BAS1K8	Layer 3 Base License for Nexus 5500 Platform	2	\$ -	\$ -
N55-LAN1K9	Layer 3 License for Nexus 5500 Platform	.2	\$ 5,700.00	\$ 11,400.00
N55-M-BLNK	Nexus 5500 Module Blank Cover	2	\$ -	\$ -
N55-PAC-750W	Nexus 5500 PS, 750W, Front to Back Airflow	4	\$ -	\$ -
N5548-ACC-KIT	Nexus 5548 Chassis Accessory Kit	2	\$ -	\$ -
N5548P-FAN	Nexus 5548P Fan Module	4	\$ -	\$ -
N5KU9K-503N1.1	Nexus 5000 Base OS Software Rel 5.0(3)N1(1)	2	\$ -	\$ -
CONSNT-N555D160L3	SMARTNET 55XNBD Nexus 5548 Layer 3 Daughter Card	10	\$ 1780.95	\$ 18,090.50
CONSNT-N5548UP	SMARTNET 55XNBD Nexus 5548 UP Chassis 32/10GbE Ports	10	\$ 193.97	\$ 1,939.70
			Subtotal	\$ 70,230.20

Cisco ASR 9006 WAN Aggregation Replacement

Part Number	Description	Qty	Unit Price	Ext. Price
ASR-9006-AC	ASR-9006 AC Chassis	1	\$ 5,130.00	\$ 5,130.00
ASR-9006-FAN	ASR-9006 Fan Tray	2	\$ 2,166.00	\$ 4,332.00
A9K-3KW-AC	3kW AC Power Module	2	\$ 1,596.00	\$ 3,192.00
CAB-AC-C6K-TWLK	Power Cord, 250Vac 16A, twist lock NEMA L6-20 plug, US	2	\$ -	\$ -
AK9-RSP-4G	ASR9K Fabric, Controller 4G memory	2	\$ 18,240.00	\$ 36,480.00
AK9-K9-03.09	Cisco IOS XR IP/MPLS Core Software 3DES	1	\$ 8,550.00	\$ 8,550.00
AK9-2T20GE-L	2-Port 10GE, 20-Port GE Low Queue LC Requires XFPs and SFPs	2	\$ 21,090.00	\$ 42,180.00
X2-10GE-SR	10GBASE-SR X2 Module	2	\$ 1,137.15	\$ 2,274.30
SFP-GE-S	1000BASE-SX SFP (DOM)	1	\$ 313.60	\$ 313.60
AK9-LC-FILR	ASR-9K Line Card Filler	3	\$ -	\$ -
CONSNT-A9K2T20L3	SMARTNET 6x5NBD 2-Port 10GE/20-Port GE Low Queue LC/Ref	10	\$ 1452.99	\$ 14,529.90
CONSNT-A9K90309	SMARTNET 6x5NBD Cisco IOS XR IP/MPLS Core Software 3DES	15	\$ 1689.05	\$ 25,335.25
CONSNT-A9KRSF4G	SMARTNET 6x5NBD Router Switch Processor/4G Memory	10	\$ 1266.04	\$ 12,660.40

CON-SNT-ASR9006A	SMARTNET 8X8NBD/ASR 9006/AC Chassis	Y5-16	15551816	2825.90
			Subtotal	\$ 135,319.25

Edge Security | Voice Gateway | Wireless | User Access

ASA 5540 Edge Security Appliance w/ HA				
Part Number	Description	Qty	Unit Price	Ext. Price
ASA5540-BUN-K9	ASA 5540 Appliance with SW, HA, 4GE+1FE, 3DES/AES	2	\$ 9,687.15	\$ 19,374.30
CAB-AC	AC Power Cord (North America), C13, NEMA 5-15P, 2.1m	2	\$ -	\$ -
SF-ASA-8.4-K8	ASA 5500 Series Software Version 8.4 for ASA 5510-5550, DES	2	\$ -	\$ -
ASA-AC-E-5540	AnyConnect Essentials VPN License - ASA 5540 (2500 Users)	2	\$ 199.50	\$ 399.00
ASA-AC-M-5540	AnyConnect Mobile - ASA 5540 (req. Essentials or Premium)	2	\$ 199.50	\$ 399.00
ASA5540-VPN-PR	ASA 5540 VPN Premium 5000 IPsec User License (7.0 Only)	2	\$ -	\$ -
ASA5500-ENCR-K9	ASA 5500 Strong Encryption License (3DES/AES)	2	\$ -	\$ -
SSM-BLANK	ASA/PS SSM Slot Cover	2	\$ -	\$ -
ASA-180W-PWR-AC	ASA 180W AC Power Supply	2	\$ -	\$ -
ASA-ANYCONN-OSD-K9	ASA 5500 AnyConnect Client + Cisco Security Desktop Software	2	\$ -	\$ -
CON-SNT-ASB-HUNK9	SMARTNET 8X8NBD/ASA 5540 w/HA 3DES/AES	10	\$ 1570.03	\$ 15,700.30
			Subtotal	\$ 35,872.60

Cisco 2921 Voice Gateways w/ Replacement				
Part Number	Description	Qty	Unit Price	Ext. Price
CISCO2921-V/K9	Cisco 2921 Voice Bundle, PVDM3-32, UC License PAK	1	\$ 2,562.15	\$ 2,562.15
VVIC2-1MFT-T1/E1	1-Port 2nd Gen Multiflex Trunk Voice/WAN Int. Card - T1/E1	1	\$ 741.00	\$ 741.00
PVDM3-128	128-channel high-density voice and video DSP module	1	\$ 3,848.00	\$ 3,848.00
PVDM3-32U128	PVDM3 32-channel to 128-channel factory upgrade	1	\$ 2,565.00	\$ 2,565.00
PWR-2921-61-AC	Cisco 2921/2951 AC Power Supply	1	\$ -	\$ -
CAB-AC	AC Power Cord (North America), C13, NEMA 5-15P, 2.1m	1	\$ -	\$ -
MEM-CF-256U512MB	256MB to 512MB CF Upgrade for Cisco 1900, 2900, 3900 ISR	1	\$ 114.00	\$ 114.00
S29UK9-15001M	Cisco 2901-2921 IOS UNIVERSAL	1	\$ -	\$ -
ISR-COP-EXP	Cisco Config Pro Express on Router Flash	1	\$ -	\$ -
MEM-2900-512MB-DEF	512MB DRAM for Cisco 2901-2921 ISR (Default)	1	\$ -	\$ -
MEM-CF-256MB	256MB Compact Flash for Cisco 1900, 2900, 3900 ISR	1	\$ -	\$ -
SL-29-IPB-K9	IP Base License for Cisco 2901-2951	1	\$ -	\$ -
SL-29-UC-K9	Unified Communication License for Cisco 2901-2951	1	\$ -	\$ -
CON-SNT-2921V	SMARTNET 8X8NBD/Cisco 2921 Voice Bundle	1	\$ 12,350.00	\$ 12,350.00
			Subtotal	\$ 11,747.65

Wireless LAN Controller Addition				
Part Number	Description	Qty	Unit Price	Ext. Price
AIR-CT5508-50-K9	5508 Series Controller for up to 50 APs	1	\$ 12,822.15	\$ 12,822.15
AIR-PWR-5500-AC	Cisco 5500 Series Wireless Controller Redundant Power Supply	1	\$ 852.15	\$ 852.15
GLC-T-	1000BASE-T SFP	4	\$ 225.15	\$ 900.60
SWC5500K9-70	Cisco Unified Wireless Controller SW Release 7.0	1	\$ -	\$ -
AIR-PWR-CORD-NA	AIR Line Cord North America	2	\$ -	\$ -
LIC-CT5508-50	50 AP Base license	1	\$ -	\$ -
LIC-CT5508-BASE	Base Software License	1	\$ -	\$ -
CON-SNT-CT0850	SMARTNET 8X8NBD/5508 Series Controller	5	\$ 1386.00	\$ 6,930.00
			Subtotal	\$ 21,504.90

Wireless LAN Controller - Anchor Addition				
Part Number	Description	Qty	Unit Price	Ext. Price
AIR-CT5508-12-K9	Cisco 5508 Series Wireless Controller for up to 12 APs	1	\$ 6,267.15	\$ 6,267.15
AIR-PWR-5500-AC	Cisco 5500 Series Wireless Controller Redundant Power Supply	1	\$ 852.15	\$ 852.15
GLC-T-	1000BASE-T SFP	4	\$ 225.15	\$ 900.60
SWC5500K9-70	Cisco Unified Wireless Controller SW Release 7.0	1	\$ -	\$ -
AIR-PWR-CORD-NA	AIR Line Cord North America	2	\$ -	\$ -
LIC-CT5508-12	12 AP Base license	1	\$ -	\$ -
LIC-CT5508-BASE	Base Software License	1	\$ -	\$ -
CON-SNT-CT0812	SMARTNET 8X8NBD/Cisco 5508 Series W	5	\$ 1077.60	\$ 5,388.00
			Subtotal	\$ 11,407.80

Wireless Control System Addition				
Part Number	Description	Qty	Unit Price	Ext. Price
WCS-STANDARD-K9	WCS Top Level SKU for AP capacity options.	1	\$ -	\$ -
WCS-PLUS-100	Cisco WCS with PLUS License for 100 APs, Windows/Linux	1	\$ 5,640.15	\$ 5,640.15
CON-SNT-WOSP100	SMARTNET 8X8NBD/Cisco WCS with PLUS	5	\$ 1122.43	\$ 5,612.15
CON-SNT-WCSSLTDK9	W/S APP SUPP & UPGR/WCS Top Level SKU for AP capacity option	5	\$ -	\$ 13,259.30
			Subtotal	\$ 13,259.30

Mobility Services Engine w/ CAS 1K & Wireless IPS 5 AP				
Part Number	Description	Qty	Unit Price	Ext. Price
AIR-MSE-B-C1-W5	MSE Bundle-MSE 3310 CAS 1K WIPS 5	1	\$ 5,697.15	\$ 5,697.15
AIR-PWR-CORD-NA	AIR Line Cord North America	1	\$ -	\$ -
SWMSE3310K9-70	Cisco 3310 Mobility Services Engine SW Release 7.0	1	\$ -	\$ -

Print Date: 5/24/2011 4:35 PM

AIR-MSE-3310-K9Z	MSE3310 BUNDLE PID; EQUIVALENT TO AIR-MSE-3310-K9	1	\$ -	\$ -	
AIR-CAS-1KC-K9	Context Aware License For 1K Clients and Tags (RSSI based)	1	\$ -	\$ -	
AIR-WIPS-AP-5	Wireless IPS License, Supporting 5 Cisco Monitor Mode APs	1	\$ -	\$ -	
CON-SAU-A1KC19	SW/APPSUPP-H-UPGR/Context/Aware/Engine for Clients license	15	\$ 1885.00	\$ 1885.00	\$ 1925.00
CON-SAU-MSEBC1W	SW/APPSUPP-H-UPGR/MSE/Bundle-MSE3310	1	\$ -	\$ -	
CON-SAU-WIPS5	SW/APPSUPP-H-UPGR/Wireless Intrusion/P	15	\$ 48123.00	\$ 48123.00	\$ 230615
CON-SNT-MSEBC1W	SMARTNET/8X6XNBD/MSE/Bundle-MSE3310	1	\$ -	\$ -	
CON-SNT-M3310K9Z	SMARTNET/8X6XNBD/AIR/MSE3310	15	\$ 43120.00	\$ 43120.00	\$ 215600
			Subtotal	\$ 12,084.30	

CleanAir Wireless AP Addition

Part Number	Description	Qty	Unit Price	Ext. Price
AIR-CAP3502I-AK910	802.11a/g/n Client-based 10APs w/CleanAir; Int; A Reg Domain	5	\$ 7,381.50	\$ 36,907.50
WCS-PLUS-UPG-100X	Cisco WCS PLUS Upgrade for 100 APs-Promo for AIR3500 EcoPack	5	\$ -	\$ -
AIR-AP-BRACKET-2	1040/1140/1260/3500 Universal Mounting Bracket	50	\$ -	\$ -
AIR-AP-T-RAIL-R	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	50	\$ -	\$ -
AIR-CAP3502I-ABULK	BOM LEVEL BULK PACK PID FOR A	50	\$ -	\$ -
S3G1RK9W8-12423JA	Cisco 3500 Series IOS Wireless LAN Controller-based Recovery	5	\$ -	\$ -
			Subtotal	\$ 36,907.50

Catalyst 3750X 24 Port User Access Replacement

Part Number	Description	Qty	Unit Price	Ext. Price
WS-C3750X-24P-S	Catalyst 3750X 24 Port PoE IP Base	27	\$ 4,161.00	\$ 112,347.00
S375KV/K9T-12253SE	CAT 3750X IOS UNIVERSAL WITH WEB BASE DEV MGR	27	\$ -	\$ -
C3KX-PWR-715WAC/2	Catalyst 3K-X 715W AC Secondary Power Supply	14	\$ 570.00	\$ 7,980.00
C3KX-NM-10G	Catalyst 3K-X 10G Network Module option PID	0	\$ 1,425.00	\$ -
C3KX-NM-1G	Catalyst 3K-X 1G Network Module option PID	25	\$ 285.00	\$ 7,125.00
GLC-SX-MM	GE SFP, LC connector SX transceiver	20	\$ 285.00	\$ 5,700.00
X2-1QGB-SR	10GBASE-SR X2 Module	0	\$ 1,137.15	\$ -
CAB-STACK-1M	Cisco StackWise 1M Stacking Cable	2	\$ 57.00	\$ 114.00
CAB-STACK-50CM	Cisco StackWise 50CM Stacking Cable	27	\$ -	\$ -
CAB-SPWR-150CM	3750X Stack Power Cable 150 CM - Upgrade	2	\$ 57.00	\$ 114.00
CAB-SPWR-30CM	Catalyst 3750X Stack Power Cable 30 CM	27	\$ -	\$ -
CAB-3KX-AC	AC Power Cord for Catalyst 3K-X (North America)	54	\$ -	\$ -
C3KX-PWR-715WAC	Catalyst 3K-X 715W AC Power Supply	27	\$ -	\$ -
			Subtotal	\$ 133,380.00

Catalyst 3750X 24 Port Spare Addition

Part Number	Description	Qty	Unit Price	Ext. Price
WS-C3750X-24P-S	Catalyst 3750X 24 Port PoE IP Base	1	\$ 4,161.00	\$ 4,161.00
S375KV/K9T-12253SE	CAT 3750X IOS UNIVERSAL WITH WEB BASE DEV MGR	1	\$ -	\$ -
C3KX-NM-1G	Catalyst 3K-X 1G Network Module option PID	1	\$ 285.00	\$ 285.00
CAB-STACK-50CM	Cisco StackWise 50CM Stacking Cable	1	\$ -	\$ -
CAB-SPWR-30CM	Catalyst 3750X Stack Power Cable 30 CM	1	\$ -	\$ -
CAB-3KX-AC	AC Power Cord for Catalyst 3K-X (North America)	1	\$ -	\$ -
C3KX-PWR-715WAC	Catalyst 3K-X 715W AC Power Supply	1	\$ -	\$ -
C3KX-PS-BLANK	Catalyst 3K-X Power Supply Blank	1	\$ -	\$ -
			Subtotal	\$ 7,141.00

Remote / Branch Offices

EOC Router (VGW) | User Access

Cisco 3945E VSEC Bundle Router Replacement

Part Number	Description	Qty	Unit Price	Ext. Price
C3945E-VSEC-SRE/K9	Cisco 3945E SRE Bundle, SRE 900, PVDM3-64, UC, SEC Lic. PAK	1	\$ 12,252.15	\$ 12,252.15
S39EUK9-15103T	Cisco 3925-3945 SPE IOS UNIVERSAL	1	\$ -	\$ -
FL-SRST	Cisco Survivable Remote Site Telephony License	1	\$ -	\$ -
FL-CME-SRST-25	Communication Manager Express or SRST - 25 seat license	3	\$ 313.50	\$ 940.50
MEM-CF-256U512MB	256MB to 512MB CF Upgrade for Cisco 1900,2900,3900 ISR	1	\$ 114.00	\$ 114.00
VIC2-4FXO	Four-port Voice Interface Card - FXO (Universal)	1	\$ 456.00	\$ 456.00
VIC3-4FXS/DID	Four-Port Voice Interface Card - FXS and DID	1	\$ 456.00	\$ 456.00
PWR-3900-AC/2	Cisco 3925/3945 AC Power Supply (Secondary PS)	1	\$ 285.00	\$ 285.00
CAB-AC	AC Power Cord (North America), C13, NEMA 5-15P, 2.1m	2	\$ -	\$ -
SM-SRE-900-BUN-K9	Services Ready Engine (SRE) 900 SM for 3900E VSEC-SRE bundle	1	\$ -	\$ -
SM9-UCSE	Configuration container for UCS Express on SRE 900 SM	1	\$ -	\$ -
SW-SM-SRE-V-1.0-K9	VMware vSphere Hypervisor (ESXi) for SRE SM	1	\$ -	\$ -
FL-SRE-V-HOST	Permanent paper license for VMware ESXi on SRE SM	1	\$ 282.15	\$ 282.15
PWR-3900-AC	Cisco 3925/3945 AC Power Supply	1	\$ -	\$ -
3900-FANASSY	Cisco 3925/3945 Fan Assembly (Bezel Included)	1	\$ -	\$ -
C3900-SPE250/K9	Cisco Services Performance Engine 250 for Cisco 3945 ISR	1	\$ -	\$ -
ISR-CCP-EXP	Cisco Config Pro Express on Router Flash	1	\$ -	\$ -
MEM-3900-1GB-DEF	1GB DRAM (512MB+512MB) for Cisco 3925/3945 ISR (Default)	1	\$ -	\$ -
PVDM3-64	64-channel high-density voice and video DSP module	1	\$ -	\$ -

SL-39-IPB-K9	IP Base License for Cisco 3925/3945	1	\$	-	\$	-
SL-39-SEC-K9	Security License for Cisco 3900 Series	1	\$	-	\$	-
SL-39-UC-K9	Unified Communication License for Cisco 3900 Series	1	\$	-	\$	-
SM-DSK-SATA-500GB	500 GB hard disk drive for SRE SM	2	\$	-	\$	-
SM-MEM-VLP-2GB	2GB Very Low Profile SDRAM for SRE SM	2	\$	-	\$	-
CON-SNT-3945EVSR	SMART NET 8X6XNB/Cisco 3945E/SRE BUN/SRE900/PVDM3-64(UC)	1	\$	1366.75	\$	(6,933.75)
					Subtotal	\$ 21,619.65

Catalyst 3750X 24 Port Replacement						
Part Number	Description	Qty	Unit Price	Ext. Price		
WS-C3750X-24P-S	Catalyst 3750X 24 Port PoE IP Base	6	\$ 4,161.00	\$	24,966.00	
S375VK9T-12253SE	CAT 3750X IOS UNIVERSAL WITH WEB BASE DEV MGR	4	\$ -	\$	-	
C3KX-PWR-715WAC/2	Catalyst 3K-X 715W AC Secondary Power Supply	3	\$ 570.00	\$	1,710.00	
C3KX-NM-1G	Catalyst 3K-X 1G Network Module option PID	6	\$ 285.00	\$	1,710.00	
GLC-SX-MM	GE SFP, LC connector SX transceiver	8	\$ 285.00	\$	2,280.00	
CAB-STACK-1M	Cisco StackWise 1M Stacking Cable	3	\$ 57.00	\$	171.00	
CAB-STACK-50CM	Cisco StackWise 50CM Stacking Cable	6	\$ -	\$	-	
CAB-SPWR-150CM	3750X Stack Power Cable 150 CM - Upgrade	2	\$ 57.00	\$	114.00	
CAB-SPWR-30CM	Catalyst 3750X Stack Power Cable 30 CM	6	\$ -	\$	-	
CAB-3KX-AC	AC Power Cord for Catalyst 3K-X (North America)	9	\$ -	\$	-	
C3KX-PWR-715WAC	Catalyst 3K-X 715W AC Power Supply	6	\$ -	\$	-	
				Subtotal	\$	30,951.00

Garfield User Access						
Catalyst 3750X 24 Port Replacement						
Part Number	Description	Qty	Unit Price	Ext. Price		
WS-C3750X-24P-S	Catalyst 3750X 24 Port PoE IP Base	4	\$ 4,161.00	\$	16,644.00	
S375VK9T-12253SE	CAT 3750X IOS UNIVERSAL WITH WEB BASE DEV MGR	4	\$ -	\$	-	
C3KX-PWR-715WAC/2	Catalyst 3K-X 715W AC Secondary Power Supply	2	\$ 570.00	\$	1,140.00	
C3KX-NM-1G	Catalyst 3K-X 1G Network Module option PID	4	\$ 285.00	\$	1,140.00	
GLC-SX-MM	GE SFP, LC connector SX transceiver	8	\$ 285.00	\$	2,280.00	
CAB-STACK-1M	Cisco StackWise 1M Stacking Cable	1	\$ 57.00	\$	57.00	
CAB-STACK-50CM	Cisco StackWise 50CM Stacking Cable	3	\$ -	\$	-	
CAB-SPWR-150CM	3750X Stack Power Cable 150 CM - Upgrade	1	\$ 57.00	\$	57.00	
CAB-SPWR-30CM	Catalyst 3750X Stack Power Cable 30 CM	4	\$ -	\$	-	
CAB-3KX-AC	AC Power Cord for Catalyst 3K-X (North America)	6	\$ -	\$	-	
C3KX-PWR-715WAC	Catalyst 3K-X 715W AC Power Supply	4	\$ -	\$	-	
				Subtotal	\$	21,318.00

Catalyst 2960S 24 Port Replacement						
Part Number	Description	Qty	Unit Price	Ext. Price		
WS-C2960S-24PS-L	Catalyst 2960S 24 GigE PoE 370W, 4x SFP LAN Base	6	\$ 2,277.15	\$	13,662.90	
GLC-SX-MM	GE SFP, LC connector SX transceiver	.8	\$ 285.00	\$	2,280.00	
CAB-AC15A-80L-US	16A AC Pwr Cord, left-angle (United States) (bundle option)	6	\$ -	\$	-	
C2960S-STACK	Catalyst 2960S FlexStack Stack Module optional for LAN Base	6	\$ 855.00	\$	5,130.00	
CAB-STK-E-0.5M	Cisco FlexStack 50cm stacking cable	6	\$ -	\$	-	
				Subtotal	\$	21,072.90

Fire Main Router (VGW) User Access						
Cisco 3925E VSEC Bundle Router Replacement						
Part Number	Description	Qty	Unit Price	Ext. Price		
C3925E-VSEC-SRE/K9	Cisco 3925E SRE Bundle, SRE 900, PVDM3-64, UC, SEC Lic. PAK	1	\$ 10,656.15	\$	10,656.15	
S39EUJK9-15103T	Cisco 3925-3945 SPE IOS UNIVERSAL	1	\$ -	\$	-	
FL-SRST	Cisco Survivable Remote Site Telephony License	1	\$ -	\$	-	
FL-CME-SRST-25	Communication Manager Express or SRST - 25 seat license	2	\$ 313.50	\$	627.00	
MEM-CF-256U512MB	256MB to 512MB CF Upgrade for Cisco 1900,2900,3900 ISR	1	\$ 114.00	\$	114.00	
VIC2-4FXO	Four-port Voice Interface Card - FXO (Universal)	1	\$ 456.00	\$	456.00	
VIC3-4FXS/DID	Four-Port Voice Interface Card - FXS and DID	1	\$ 456.00	\$	456.00	
PWR-3900-AC/2	Cisco 3925/3945 AC Power Supply (Secondary PS)	1	\$ 285.00	\$	285.00	
CAB-AC	AC Power Cord (North America), C13, NEMA 5-15P, 2.1m	2	\$ -	\$	-	
SM-SRE-900-BUN-K9	Services Ready Engine (SRE) 900 SM for 3900E VSEC-SRE bundle	1	\$ -	\$	-	
SM9-UCSE	Configuration container for UCS Express on SRE 900 SM	1	\$ -	\$	-	
SW-SM-SRE-V-1.0-K9	VMware vSphere Hypervisor (ESX) for SRE SM	1	\$ -	\$	-	
FL-SRE-V-HOST	Permanent paper license for VMware ESXi on SRE SM	1	\$ 282.15	\$	282.15	
PWR-3900-AC	Cisco 3925/3945 AC Power Supply	1	\$ -	\$	-	
3900-FANASSY	Cisco 3925/3945 Fan Assembly (Bezel included)	1	\$ -	\$	-	
C3900-SPE200/K9	Cisco Services Performance Engine 200 for Cisco 3925E	1	\$ -	\$	-	
ISR-CCP-EXP	Cisco Config Pro Express on Router Flash	1	\$ -	\$	-	
MEM-3900-1GB-DEF	1GB DRAM (512MB+512MB) for Cisco 3925/3945 ISR (Default)	1	\$ -	\$	-	
PVDM3-64	84-channel high-density voice and video DSP module	1	\$ -	\$	-	
SL-39-IPB-K9	IP Base License for Cisco 3925/3945	1	\$ -	\$	-	
SL-39-SEC-K9	Security License for Cisco 3900 Series	1	\$ -	\$	-	
SL-39-UC-K9	Unified Communication License for Cisco 3900 Series	1	\$ -	\$	-	
SM-DSK-SATA-500GB	500 GB hard disk drive for SRE SM	2	\$ -	\$	-	

SM-MEM-VLP-2GB	2GB Very Low Profile SDRAM for SRE SM	2	\$ -	\$
CONSNT-3925EVSR	CSMART/NET/8X5XNBD/Disco3925E/SRE/Bun/SRE900/PVDM3-64/UC	5	\$ -	\$ 16,582.50
			Subtotal	\$ 18,458.80

Catalyst 2960S 24 Port Replacement

Part Number	Description	Qty	Unit Price	Ext. Price
WS-C2960S-24PS-L	Catalyst 2960S 24 GigE PoE 370W, 4 x SFP LAN Base	5	\$ 2,277.15	\$ 11,385.75
GLC-SX-MM	GE SFP, LC connector SX transceiver	6	\$ 285.00	\$ 1,710.00
CAB-AC15A-90L-US	15A AC Pwr Cord, left-angle (United States) (bundle option)	5	\$ -	\$ -
C2960S-STACK	Catalyst 2960S FlexStack Stack Module optional for LAN Base	5	\$ 855.00	\$ 4,275.00
CAB-STK-E-0.5M	Cisco FlexStack 50cm stacking cable	5	\$ -	\$ -
			Subtotal	\$ 17,370.75

Library Main Router (VGW) | User Access

Part Number	Description	Qty	Unit Price	Ext. Price
C3945E-VSEC-SRE/K9	Cisco 3945E SRE Bundle, SRE 900, PVDM3-64, UC, SEO Lic. PAK	1	\$ 12,252.15	\$ 12,252.15
S39EUK9-15103T	Cisco 3925-3945 SPE IOS UNIVERSAL	1	\$ -	\$ -
FL-SRST	Cisco Survivable Remote Site Telephony License	1	\$ -	\$ -
FL-CME-SRST-25	Communication Manager Express or SRST - 25 seat license	3	\$ 313.50	\$ 940.50
MEM-CF-2565U12MB	256MB to 512MB CF Upgrade for Cisco 1900,2900,3900 ISR	1	\$ 114.00	\$ 114.00
VIC2-4FXO	Four-port Voice Interface Card - FXO (Universal)	1	\$ 456.00	\$ 456.00
VIC3-4FXS/DID	Four-Port Voice Interface Card - FXS and DID	1	\$ 456.00	\$ 456.00
PWR-3800-AC/2	Cisco 3925/3945 AC Power Supply (Secondary PS)	1	\$ 285.00	\$ 285.00
CAB-AC	AC Power Cord (North America), C13, NEMA 5-15P, 2.1m	2	\$ -	\$ -
SM-SRE-900-BUN-K9	Services Ready Engine (SRE) 900 SM for 3900E VSEC-SRE bundle	1	\$ -	\$ -
SM9-UCSE	Configuration container for UCS Express on SRE 900 SM	1	\$ -	\$ -
SW-SM-SRE-V-1.0-K9	VMware vSphere Hypervisor (ESX) for SRE SM	1	\$ -	\$ -
FL-SRE-V-HOST	Permanent paper license for VMware ESXi on SRE SM	1	\$ 282.15	\$ 282.15
PWR-3800-AC	Cisco 3925/3945 AC Power Supply	1	\$ -	\$ -
3900-FANASSY	Cisco 3925/3945 Fan Assembly (Bezel included)	1	\$ -	\$ -
C3900-SPE250/K9	Cisco Services Performance Engine 250 for Cisco 3945 ISR	1	\$ -	\$ -
ISR-CCP-EXP	Cisco Config Pro Express on Router Flash	1	\$ -	\$ -
MEM-3900-1GB-DEF	1GB DRAM (512MB+512MB) for Cisco 3925/3945 ISR (Default)	1	\$ -	\$ -
PVDM3-64	84-channel high-density voice and video DSP module	1	\$ -	\$ -
SL-39-IPB-K9	IP Base License for Cisco 3925/3945	1	\$ -	\$ -
SL-39-SEC-K9	Security License for Cisco 3900 Series	1	\$ -	\$ -
SL-39-UC-K9	Unified Communication License for Cisco 3900 Series	1	\$ -	\$ -
SM-DSK-SATA-500GB	500 GB hard disk drive for SRE SM	2	\$ -	\$ -
SM-MEM-VLP-2GB	2GB Very Low Profile SDRAM for SRE SM	2	\$ -	\$ -
CONSNT-3945EVSR	CSMART/NET/8X5XNBD/Disco3945E/SRE/Bun/SRE900/PVDM3-64/UC	5	\$ -	\$ 16,582.50
			Subtotal	\$ 21,619.65

Catalyst 3750X 24 Port Replacement

Part Number	Description	Qty	Unit Price	Ext. Price
WS-C3750X-24P-S	Catalyst 3750X 24 Port PoE IP Base	4	\$ 4,161.00	\$ 16,644.00
S375XVK9T-12253SE	CAT 3750X IOS UNIVERSAL WITH WEB BASE DEV MGR	4	\$ -	\$ -
C3KX-PWR-715WAC/2	Catalyst 3K-X 715W AC Secondary Power Supply	2	\$ 570.00	\$ 1,140.00
C3KX-NM-1G	Catalyst 3K-X 1G Network Module option PID	4	\$ 285.00	\$ 1,140.00
GLC-SX-MM	GE SFP, LC connector SX transceiver	12	\$ 285.00	\$ 3,420.00
CAB-STACK-1M	Cisco StackWise 1M Stacking Cable	1	\$ 57.00	\$ 57.00
CAB-STACK-50CM	Cisco StackWise 50CM Stacking Cable	4	\$ -	\$ -
CAB-SPWR-150CM	3750X Stack Power Cable 150 CM - Upgrade	1	\$ 57.00	\$ 57.00
CAB-SPWR-30CM	Catalyst 3750X Stack Power Cable 30 CM	4	\$ -	\$ -
CAB-3KX-AC	AC Power Cord for Catalyst 3K-X (North America)	6	\$ -	\$ -
C3KX-PWR-715WAC	Catalyst 3K-X 715W AC Power Supply	4	\$ -	\$ -
			Subtotal	\$ 22,458.00

Catalyst 2960S 24 Port Replacement

Part Number	Description	Qty	Unit Price	Ext. Price
WS-C2960S-24PS-L	Catalyst 2960S 24 GigE PoE 370W, 4 x SFP LAN Base	8	\$ 2,277.15	\$ 18,217.20
GLC-SX-MM	GE SFP, LC connector SX transceiver	10	\$ 285.00	\$ 2,850.00
CAB-AC15A-90L-US	15A AC Pwr Cord, left-angle (United States) (bundle option)	8	\$ -	\$ -
C2960S-STACK	Catalyst 2960S FlexStack Stack Module optional for LAN Base	8	\$ 855.00	\$ 6,840.00
CAB-STK-E-0.5M	Cisco FlexStack 50cm stacking cable	8	\$ -	\$ -
			Subtotal	\$ 27,907.20

Medium Site Routers (VGW) | User Access

Part Number	Description	Qty	Unit Price	Ext. Price
CISCO2921-V/K9	Cisco 2921 Voice Bundle, PVDM3-32, UC License PAK	2	\$ 2,562.15	\$ 5,124.30
FL-SRST	Cisco Survivable Remote Site Telephony License	2	\$ -	\$ -
FL-CME-SRST-25	Communication Manager Express or SRST - 25 seat license	2	\$ 313.50	\$ 627.00

VIC2-4FXO	Four-port Voice Interface Card - FXO (Universal)	2	\$ 456.00	\$ 912.00
VIC3-4FXS/DID	Four-Port Voice Interface Card - FXS and DID	2	\$ 456.00	\$ 912.00
PWR-2921-51-AC	Cisco 2921/2951 AC Power Supply	2	\$ -	\$ -
CAB-AC	AC Power Cord (North America), C13, NEMA 5-15P, 2.1m	2	\$ -	\$ -
MEM-CF-256U512MB	256MB to 512MB CF Upgrade for Cisco 1900, 2900, 3900 ISR	2	\$ 114.00	\$ 228.00
S28UK9-15001M	Cisco 2901-2921 IOS UNIVERSAL	2	\$ -	\$ -
ISR-COP-EXP	Cisco Config Pro Express on Router Flash	2	\$ -	\$ -
MEM-2900-512MB-DEF	512MB DRAM for Cisco 2901-2921 ISR (Default)	2	\$ -	\$ -
MEM-CF-256MB	256MB Compact Flash for Cisco 1900, 2900, 3900 ISR	2	\$ -	\$ -
SL-29-IPB-K9	IP Base License for Cisco 2901-2951	2	\$ -	\$ -
SL-29-UC-K9	Unified Communication License for Cisco 2901-2951	2	\$ -	\$ -
CONSNT-2921V	SMARTNET 8X5KNBD Cisco 2921V6cel Bundle	10	\$ 123.50	\$ 1,235.00
			Subtotal	\$ 12,036.30

Catalyst 2960S 24 Port Replacement (Lakewood Parks)

Part Number	Description	Qty	Unit Price	Ext. Price
WS-C2960S-24PS-L	Catalyst 2960S 24 GigE PoE 370W, 4 x SFP LAN Base	6	\$ 2,277.15	\$ 13,662.90
GLC-SX-MM	GE SFP, LC connector SX transceiver	2	\$ 285.00	\$ 570.00
CAB-AC15A-90L-US	15A AC Pwr Card, left-angle (United States) (bundle option)	6	\$ -	\$ -
C2960S-STACK	Catalyst 2960S FlexStack Stack Module optional for LAN Base	6	\$ 855.00	\$ 5,130.00
CAB-STK-E-0.5M	Cisco FlexStack 50cm stacking cable	6	\$ -	\$ -
			Subtotal	\$ 19,362.90

Small Branch Routers (VGW) | User Access

Cisco 1861 Voice Routers (Fire Hall 2/4/5/6/7/10)

Part Number	Description	Qty	Unit Price	Ext. Price
C1861-SRST-F/K9	1861,8-user SRST or CME,4FXS,4FXO, 8xPOE, SP Svcs, HWIC slot	6	\$ 2,277.15	\$ 13,662.90
CAB-AC	AC Power Cord (North America), C13, NEMA 5-15P, 2.1m	6	\$ -	\$ -
S1860AISK9-12424T	Cisco 1861 IOS SPSK9-AISK9 FEAT SET FACTORY UPG	6	\$ 456.00	\$ 2,736.00
MEM1860-128CF	128MB CF for 1861	6	\$ -	\$ -
PWR-1860-220W	1861 Desk Top Power Adapter 100-240VAC	6	\$ -	\$ -
CCP-CD	CCP On CD And CCP Express On Flash	6	\$ -	\$ -
CONSNT-SRST	SMARTNET 8X5KNBD 1861 8user SRST 4FXS/4FXO/8xPOE	30	\$ 125.95	\$ 3,778.50
			Subtotal	\$ 24,137.40

Catalyst 3560 24 Port Replacement (40th, 72nd Building Maint, DIA, MNDO, WA Washington)

Part Number	Description	Qty	Unit Price	Ext. Price
These sites will reuse existing Catalyst 3560 switches removed from the Library. None of these locations requires stack capable switches.				

Product Total: \$ 833,760.09
 Maintenance Total: \$ 151,482.10
Product / Maintenance Subtotal: \$ 985,242.19

Enventis Installation Services (Estimated): \$ 228,900.00

Quote Total: \$ 1,214,142.19

Estimated Sales Tax at 6.875%: \$ 75,140.76
 Estimated Shipping (FedEx Ground): \$ 5,000.00

Quote Grand Total (Estimated): \$ 1,294,282.95

Enventis/Cisco Investment in the City of Duluth Credit: (\$90,000)

Payment Terms:

Hardware and Maintenance payments are due net 30 days from time of delivery.

Assumptions:

Enventis/Cisco Investment in the City of Duluth Credit may be applied towards Enventis-provided services such as:
 1) hardware 2) Professional Services 3) Staff augmentation and/or 4) Total Care Support

Any proposed services subject to terms in scope of work

Purchase Order subject to Enventis standard Terms and Conditions

Pricing is valid for 30 days.

All returns are subject to 10% restocking fee